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Layering is a reliable way to reproduce your favorite shrubs, trees, vines, or evergreens. The method is usually successful because the layered stem is nourished by the parent plant until it has formed its own roots and is able to survive by itself. All plants produced in this way have the same flower, fruit, and foliage characteristics as the parent plant.

Simple layering is used for plants that have stems flexible enough to be bent to the ground. Air layering is used on plants with stiff stems that cannot be bent. Mound layering is used on flexible-stemmed plants. Layering by any of the three methods should be started in early spring.

SIMPLE LAYERING

Select a stem about the size of a lead pencil from the previous season's growth. With a sharp knife, slit or notch the bark on the under side of the stem just below a node (figure 1). New roots will be produced in this area. Strip the leaves from the part of the stem to be rooted, but do not remove leaves from the tip of the stem.

Dig a trench about six-inches deep in a location convenient to the prepared stem. Mix peat or some other organic material with the loose soil. Bend the stem to place the slit or notch two or three inches deep in the prepared trench. Leave the tip of the stem, with leaves intact, above the ground. Use a bent wire, forked stick, a stone, or some other device to hold the stem in place (figure 2). Firm the prepared soil around the stem. Rooting usually occurs within one to six months, depending on the plant.

If more than one plant of a kind is wanted, several stems from the same plant can be layered. Long stems such as those on vines are layered in several places to produce a number of plants (figure 3).

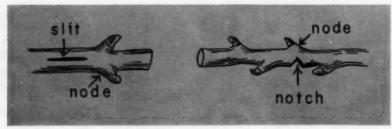


Figure 1. A stem about the size of a lead pencil from the previous season's growth is prepared for layering

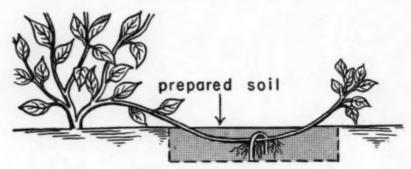


Figure 2. A simple layer

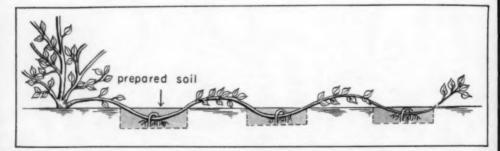


Figure 3. A multiple layer

When the layered stems have rooted plentifully, cut them away from the parent plant. Although most layered plants are not ready for setting until early the following spring, abundantly rooted layers may be separated and planted in summer if the new plants are kept moist during dry periods.

AIR LAYERING

For air layering, select a well-branched, upright stem. Slit or notch the stem as illustrated in figure 1, or ring the stem.

Pack three or four handfuls of wet sphagnum moss around the prepared portion of the stem and tie it in place with a string. Wrap polyethylene over the wet sphagnum and tie the cover tightly at each end (figure 4).

The new roots of air layers may be injured by freezing if left on the plant over the winter. Cut them away from the mother plant and set them in good soil before freezing weather arrives.

MOUND LAYERING

Many vigorous, well-established shrubs that are growing in well-drained sandy loam soil can be propagated by mound layering before growth starts in the spring. Cut the shrub back to about five inches above the soil level. Then mound soil over the base of the plant until the tops of the stub ends are buried ½-inch deep.

Shoots soon arise from the cut stems. As they grow taller, add soil gradually among them. By fall the old stub



Figure 4. Air layering

ends should be buried three to four inches below the surface of the mound. The following spring, gently fork away the soil. Cut off the rooted stems and set out the young plants (figure 5).

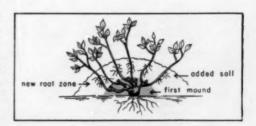


Figure 5. Mound layering

CARE OF YOUNG PLANTS

Each new plant should have a good root system and a top with leaves or leaf buds (figure 6). Plant each rooted layer in well-drained loamy soil, or poorer soil that has been prepared with peat. During the first growing season, water the plant as often as necessary to keep the ground moist. Provide water and fertilizer each season to stimulate growth and produce strong plants.



Figure 6. A rooted layer

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